

properties and to alleviate joint pain. The aim of the present study was to test if the powder would reduce joint pain, patient's evaluation of the severity of their disease (PGAD) and the consumption of rescue medication in a group of middle-aged women suffering from osteoarthritis of different joints.

**Methods:** The study was randomized, double-blind and placebo-controlled. Available for the evaluation was 42 women, who either received active treatment or placebo (5 gram daily) in capsules for a three months period after which the group initially treated with active treatment was changed to placebo or vice versa for another three months treatment period.

Pain and stiffness were estimated on categorical scales from 0 (no impact) to 4 (total relief of the symptom). Visual analogue scales were used to analyse patients' global assessment of their disease severity (PGAD) and the consumption of rescue medication was estimated by simply counting tablets.

**Results:** Active treatment resulted in a significant reduction in the mean pain score:  $1.85 \pm 1.4$  while on placebo vs. mean  $1.15 \pm 1.4$  while on active treatment ( $p < 0.039$ ). Joint stiffness likewise tended to declined as a result of active treatment ( $p < 0.067$ ) when comparing all women. Comparing the group initially taking placebo and then changed to active treatment ( $n=21$ ), resulted in a significant reduction in stiffness ( $p < 0.014$ ) suggesting carry-over.

In accordance with the findings on pain and stiffness PGAD also declined as a result of active treatment ( $p < 0.034$ ) when all patients were included. Evaluating the group receiving placebo first and then active treatment resulted in a ( $p < 0.0068$ ). Active treatment also significantly reduced the consumption of paracetamol ( $p < 0.024$ ).

**Conclusions:** The present data suggest that LitoZin reduces pain and disease severity. In accordance with these observations the consumption of rescue medication decline.

### P358

#### THE ROLE OF OCCUPATIONAL MECHANICAL LOAD ON PAIN AND FUNCTIONAL LIMITATION IN PERUVIAN PATIENTS WITH SYMPTOMATIC KNEE OA

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**Purpose:** Pain and functional limitation are major outcomes in knee osteoarthritis (OA). The influence of mechanical loading at work on pain and disability in knee OA patients is still difficult to estimate for various factors, including long latency before the patients develop pain and, particularly, functional and work disability. Therefore, we examined the role of occupational mechanical load on the pain experience and functional limitation in Peruvian patients with symptomatic knee OA.

**Methods:** 130 patients with knee OA from rheumatology and rehabilitation clinics in several hospitals from Lima-Perú were selected by inclusion and exclusion criteria. We used self-reported measures to estimate pain and functional impairment: a 0-10 visual analog scale for global pain (VAS-GP) and worst pain felt within the last month (VAS-WP), and pain and function subscales of Spanish version of the WOMAC index. Other variables were also studied: age, gender, body mass index (BMI), working years (WY) and WOMAC stiffness subscale. Subsequently, we divided the sample was divided in three groups: low, intermediate and high physical loading occupations. ANOVAs, Pearson's correlation, Levine test, t-student and the least significative difference

for multiple comparisons were used to study the relationships between the variables.

**Results:** Age: mean= 66.9 years old (48 - 85 years old). BMI: mean=  $29.4 \text{ kg/m}^2$  ( $19.6 - 40.4 \text{ kg/m}^2$ ). WY: mean= 38.41 y (2 - 66 y). The correlation coefficients for the relationships between VAS-GP, VAS-WP and WOMAC pain, and WOMAC function subscales were 0.45, 0.30 and 0.75, respectively. All the relationships were significant positive and linear. There was a significant difference between the means of WOMAC pain from the groups of patients with low and intermediate occupational mechanical load. No significant difference was observed between the means of age, BMI, VAS-GAP, VAS-WP, WOMAC stiffness and WOMAC function from the groups of patients with low, intermediate and high occupational mechanical load. Nevertheless, a clear increase in the mean values of WOMAC pain, WOMAC stiffness and WOMAC function was seen when comparing the groups of patients with low, intermediate and high occupational mechanical load. 52.5% of patients were still working. Among the patients no currently working, 29.7% mentioned knee pain as the cause to leave their jobs.

**Conclusions:** In this sample of Peruvian patients with symptomatic knee OA pain and disability maintained a significant positive linear relationship. There was a significant difference between the means of WOMAC pain from the groups of patients with low and intermediate occupational mechanical load. However, the means of other pain and disability measures from the groups of patients with low, intermediate and high occupational mechanical load were no significantly different, even though a clear increase in the means was observed among the three groups. Further studies are needed to evaluate precisely the role of occupational mechanical load in peruvian patients with symptomatic knee OA.

### P359

#### CONSTRUCT VALIDATION OF THE PATIONNAIRE, A PATIENT QUESTIONNAIRE FOR CLINICAL ASSESSMENT IN BONE AND JOINT DISEASES - COMPARISON OF QUESTIONNAIRE WITH PERSONAL INTERVIEWS

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**Purpose:** The aim of this study was to test the construct validity of the pationnaire with personal interviews (agreement of symptoms and disabilities) and the ability and time to fill it out without help. The pationnaire is graphic questionnaire to assess a person/patient with any disorder of the musculoskeletal system. It can be used either than a diagnostic tool or an outcome assessment tool.

**Methods:** The persons/patients were randomly selected by the interviewer. They signed an informed consent approved by the local ethical committee. After a short introduction about the pationnaire and its aims, people filled out one directly without help. The time to completion was measured. The person/patient was the personally interviewed about the items within the pationnaire to assess the correlation with their symptoms and disabilities and uncover any sources of misunderstanding or misinterpretation. At the end of the interview every person/patient was asked for a statement about their understanding, formulations, difficulties with the pationnaire, missing questions and general impression.

**Results:** 78 persons/patients (50 women) were included. Their average age was 46.3 years (range 12-93 years). 97% (76) could fill out the pationnaire without help, 2 needed help and further explanations. Average time for completion was 9.9 min (range 3-45 mins. - the longest time being taken by those who needed help. Complete agreement between the pationnaire and